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Via email

Dear Ms. Montauti:

Please accept this scope of practice proposal that is submitted by the Connecticut Dental Hygienists' Association (CDHA), the professional organization of licensed dental hygienists in Connecticut.

I will be the point of contact for all future correspondence relating to the submission.

Thank you.

Sincerely,

Marie R. Paulis, RDH, MSDH
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SCOPE OF PRACTICE REQUEST

1. A plain language description of the request

This submission is to permit Connecticut Licensed dental hygienists to administer nitrous oxide in oral health care settings, while the dentist is on premises.

2. Public health and safety benefits that the requestor believes will occur if the request is implemented and, if applicable, a description of any harm to public health and safety if it is not implemented

By way of background, the administration of nitrous oxide diminishes or eliminates the sensibility to pain in the conscious patient. This is important in that many patients want to be awake during procedures. With nitrous oxide safely administered by dental hygienists, the patient can experience the relief of pain without loss of consciousness.

Under this proposal, dental hygienists could perform the initial set-up of the nitrous oxide and begin dispensing the nitrous oxide analgesia. He or she may change the settings as needed while monitoring the patient during the procedure. For purposes of this submission, the activity would be under “indirect supervision,” meaning a licensed dentist would authorize and prescribe the use of nitrous oxide for a patient and remain in the dental office or other location where the services are being performed by the dental hygienist.

Placing guidelines for safe practice and education into the CT State Practice Act ensures patient safety. Furthermore, dental hygienists who hold dual licensure and live and work on the border between New York and CT can administer nitrous in NY but not in CT.

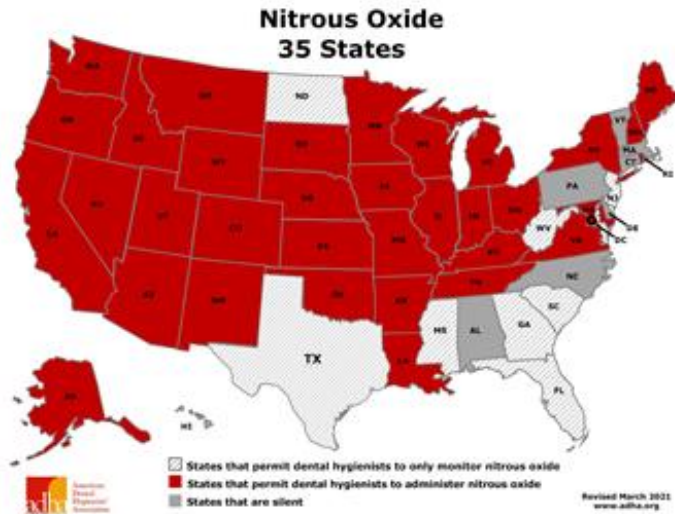
Nitrous oxide used in dentistry is administered as a combination of oxygen and nitrous oxide and is used by 58% of all dentists and 89% of dentists in the pediatric setting to help patients lessen their dental anxiety and as a form of pain control ⁽¹⁾.

Dental hygienists have been administering nitrous oxide in other states since 1971. No cases of malpractice have occurred. Under Connecticut law, dental hygienists must carry malpractice insurance and delivering nitrous oxide will be covered by their existing policies provided it is within their scope of practice. ⁽²⁾

Nitrous oxide provides a more comfortable and relaxing dental experience for the patient but is provided more frequently for children from a higher socioeconomic status and less frequently for minority children in public health settings. ⁽³⁾

Our proposal addresses this serious social inequity.

As demonstrated in the following map, dental hygienists are able to utilize nitrous oxide in 35 states, including the northeastern states of New York, New Hampshire, Maine, and Rhode Island. The State of Connecticut would benefit pediatric and adult dental patients well as its students by incorporating this scope of practice change.



Enabling more health care providers to provide safe and effective treatment will incentivize more patients to see an oral health care provider if they know that nitrous oxide is available with competent staff administering it. Access is enhanced because the dentist is freed up to assist with other patient needs. This change is needed to provide all patients with equal access to pain management. Using the standard of care in pain management will benefit the public by encouraging anxious patients to seek dental treatment thereby avoiding more extensive and costly treatment.

In addition, since most states, including those surrounding Connecticut, like New York, New Hampshire, Maine, and Rhode Island, permit dental hygienists to administer nitrous oxide, dental hygienists educated in those states may be more likely to come to Connecticut to work if Connecticut enabled them to work to the full scope of their education and training. Enabling Connecticut dental hygienists to administer nitrous oxide would align them more in scope of practice with other states in the northeastern United States.

Students attending our Connecticut dental hygiene programs are not able to be certified in the administration of nitrous oxide use. If students do leave the State of Connecticut to practice elsewhere, they have to take a course in nitrous oxide administration in their new state, pay fees there and further their education in order to be licensed. Furthermore, patients who seek care at a dental hygiene school who are typically of low socio-economic status and cannot afford a private practice setting do not get the benefit of that service. This is clearly a health disparity. Connecticut citizens deserve equal access to high quality oral health dental hygiene care, be it in public health or dental hygiene school settings.

3. The impact of the request on public access to health care

Access to pain management will benefit the public. Permitting dental hygienists to deliver nitrous oxide under indirect supervision, the same supervision required of local anesthesia, would alleviate a gap in the oral health safety net. This will ensure success in pain control management, which in turn, creates a comfortable patient, who has less anxiety about receiving needed care. This will establish a

practice climate for Connecticut which will allow hygienists to be able to deliver more comprehensive care to a greater number of needy citizens. More comfortable dental treatment will encourage patients to schedule dental appointments, improving the percentage of people who seek dental care.

4. Proposed education, training, and examination requirements and any relevant certification requirements applicable to the profession

According to the Connecticut Department of Public Health an applicant must:

- a. Be a graduate of a program accredited by the Commission on Dental Accreditation (CODA)
- b. Successfully complete a written board exam by the Joint Commission on National Dental Examinations, specifically the National Board Dental Hygiene Exam (NBDHE)
- c. Successfully complete a clinical examination from any of the following:
 - i. Commission on Dental Competency Assessments (CDCA)
 - ii. Council of Interstate Testing Agencies
 - iii. Southern Regional Dental Testing Service
 - iv. Central Regional Dental Testing Service
 - v. Western Regional Examining Board
- d. Provide official transcripts of their dental hygiene education verifying the award of a degree in dental hygiene.
- e. Provide an official report of written and clinical board examinations.

It is proposed that, in order for a dental hygienist to be certified in nitrous oxide administration, they must complete an 8-hour course consisting of 6- didactic hours and 2 clinical/hands-on hours. The didactic hours will include content on:

- Recognizing patient indications/contraindications for use of nitrous oxide;
- Managing medical emergencies;
- Steps in administration, monitoring, and documentation;
- Pharmacological effects of nitrous oxide;
- Scope of practice regulations of practice (dentist must be present);
- Recognizing dangers and minimizing toxicity nitrous oxide.

The clinical hours must include a minimum of 4 mock patient situations in which nitrous oxide is administered, monitored, and safely concluded. An exam, which must be passed with a 75% minimum score, to demonstrate competency.

5. A summary of known scope of practice changes requested or enacted concerning the profession in the five years preceding the request

In 2019, a change in the dental hygiene scope of practice in Connecticut was passed for the inclusion of dental therapy (Public Act No. 19-56): "Dental therapist" means a licensed dental hygienist authorized to engage in the practice of dental therapy under a collaborative agreement in a public health facility". Further education post dental hygiene education is required and must follow the standards determined by the Commission on Dental Accreditation (CODA). CDHA has submitted scope requests for the administration of nitrous oxide previously, in 2021-2022 and in 2022-2023. We are submitting the proposal once again because the need for it continues to grow; it would be especially valuable in

helping to reduce social and health care disparities.

6. The extent to which the request directly affects existing relationships within the health care delivery system

The majority of licensed dental hygienists are employed in private practice dental offices working under the general supervision of a dentist. General supervision does not require the physical presence of a dentist, but the dentist must authorize the procedures. This proposal suggests that nitrous oxide administration fall under the same auspices as local anesthesia and require indirect supervision of the dentist.

7. The anticipated economic impact of the request on the health care delivery system

This scope change will have a positive impact on the health care delivery system. Private dental offices will benefit as patients will receive access to quality oral health care. Comfortable completion of regular dental care will prevent disease from advancing and patients will be less likely to have serious disease. As the cost does not depend on the provider, enacting this proposal request will not have a fiscal impact on the health care system. The ability of a dental hygienist to administer nitrous oxide will permit dental hygienists to perform needed care.

A study from the Journal of the American Dental Association (JADA) indicates that uninsured and underserved patients visit hospital emergency departments for tooth pain and dental care; however, emergency departments are not equipped to provide definitive oral health care. When definitive care is not provided, patients may repeatedly return for treatment of the unresolved condition. The result is expensive emergent care billed to Medicaid or the uninsured patient. The more comprehensive care provided to underserved patients decreases the likelihood of the patients' need to visit emergency departments for oral health care.

According to Pediatric Dentistry a three-year aggregate comparison showed Medicaid reimbursement for in-patient emergency department treatment (\$6,498) versus preventive treatment (\$660). This revealed that on average, the cost to manage symptoms related to dental caries (cavities / decay) on an in-patient basis is approximately 10 times more costly than to provide dental care for the same patients in a private or public setting dental practice. Thus, providing pain control management in all settings and adding general supervision, will alleviate the burden of the health care system in dealing with pain, and improve preventive strategies regarding oral health.

8. Regional and national trends in licensing of the health profession making the request, and a summary of relevant scope of practice provisions enacted in other states

Dental hygienists work in a host of settings to deliver clinical care. Each state enacts its own laws determining the services dental hygienists can perform, the settings in which they can practice and the supervision under which they practice.

As mentioned earlier, 35 states permit dental hygienists to administer nitrous oxide. There have not been any unfavorable reports.

9. Identification of any health care professions that can reasonably be anticipated to be directly affected by the request, the nature of the impact, and efforts made by the requestor to discuss it with such health care professions

The proposed change will be for all dental treatment settings but is proposed to be under indirect supervision, meaning the dentist must be present. Any health care professionals working together with a dental hygienist will be positively affected. As is current custom, dentists and public health care facilities will work collaboratively with dental hygienists. The dentist, as the administrator of the dental practice, or the public health facility administrator, will have the option to authorize their dental hygienist to administer nitrous oxide. The benefits of teamwork, continuity of care and the ability for hygienists to offer the highest level of pain control management to all citizens, regardless of practice settings, will alleviate disparities and foster team collaboration between dentists and hygienists. Should there be opposition among CSDA, we believe further conversations can result in a consensus or compromise, especially since this proposal requests that the scope include administration of nitrous oxide only with the presence of the dentist, indirect supervision.

10. A description of how the request relates to the health care profession's ability to practice to the full extent of the profession's education and training

Dental hygienists will have the education and training to administer nitrous oxide. The dental hygiene practice act stipulates the requirements for dental hygienists to administer it. Permitting nitrous oxide to be administered under indirect supervision will give patients in dental settings the opportunity to receive high quality care in regard to pain control management. Patients treated with pain control for extensive dental hygiene procedures experience less anxiety and are more likely to schedule future office visits and comply with a home care regimen. All patients who receive dental hygiene care deserve access to quality oral hygiene care. There should be no disparities based on socio-economic status regarding proper pain control management. Dentists and practice owners should have the option to have the employee hygienist provide the same quality of pain control management.

If selected, we would request to have ADHA and the other Connecticut dental hygiene programs as participants in the Scope of Practice Review Committee. We look forward to participating in a Scope of Practice Committee if the Department decides to pursue the concept further.

References:

1. Centers for Disease Control and Prevention (2017). Health and safety practices survey of healthcare workers. <https://www.cdc.gov/niosh/topics/healthcarehsp/nitrous.html>
2. Henry Schein Dental (2009). Increasing use of nitrous oxide by dental hygienists. <https://henryscheinequipmentcatalog.com/content-library/increasing-use-of-nitrous-oxide-by-dental-hygienists/>
3. Reich, S., Hoeft, K., Diaz, G., Ochoa, W., Gaona, A. (2019). Social Policy Report. Disparities in the quality of pediatric dental care: New research and needed changes. <https://srcd.onlinelibrary.wiley.com/doi/10.1002/sop2.2>